

Johnson Controls conducts an annual Energy Efficiency Indicator survey tracking current and planned investments, key drivers, and organizational barriers to improving energy efficiency in facilities. Since the first survey was released in 2007, almost 26,000 energy and facility management leaders have been surveyed. This year marks the 12th edition of the survey with over 1,900 respondents represented from twenty countries, including 100 leaders from South Korea.



SOUTH KOREA

GLOBAL

INTEREST AND INVESTMENT IN ENERGY EFFICIENCY AND SMART BUILDING TECHNOLOGY

73% of organizations are paying more attention

61% of organizations plan to increase energy efficiency and renewable energy investments

34% plan to keep their investment level the same

59% of organizations plan to increase investment, up slightly from **58%** last year

DRIVERS IN ENERGY INVESTMENT DECISIONS

1. Energy cost savings
2. Attracting and retaining employees
3. Greenhouse gas footprint reduction
4. Increasing energy security
5. Enhanced brand and reputation

1. Energy cost savings
2. Greenhouse gas footprint reduction
3. Increasing energy security
4. Enhanced brand or reputation
5. Attracting/ retaining employees

TOP BARRIERS TO INVESTMENT

25% Lack of technical expertise to evaluate or execute projects

22% Lack of funding to pay for improvements

19% Uncertainty regarding savings and performance

28% Lack of technical expertise to evaluate or execute projects

22% Lack of funding to pay for improvements

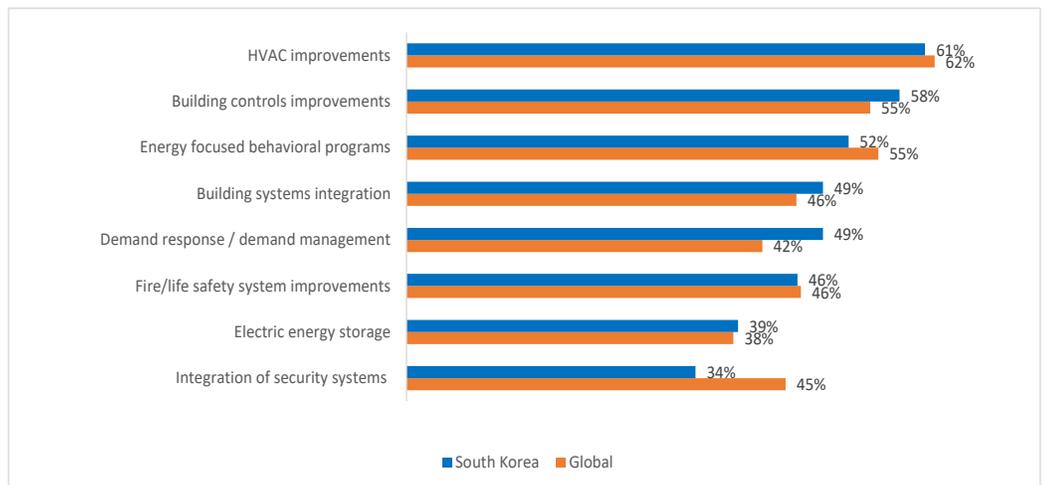
18% Uncertainty regarding savings and performance

TOP ENERGY EFFICIENCY MEASURES

PAST 12 MONTHS

1. Energy focused behavioral programs
2. Integration of security systems with other building technology systems
3. Heating, ventilation and air-conditioning
4. Building controls
5. Building systems integration
6. Integration of fire/life safety systems
7. Centralized building operations center
8. Fire / life safety improvements

NEXT 12 MONTHS



2018 ENERGY EFFICIENCY INDICATOR SURVEY

SOUTH KOREA

For more information on the study, please visit www.johnsoncontrols.com

- Building systems integration is on the rise with almost half of the South Korean respondents indicating they would invest over the coming 12 months.
- **Cybersecurity, systems integration, and the Internet of Things** were identified as the technology trends and issues to have the biggest impact on the implementation of smart buildings over the next five years.

| | SOUTH KOREA | | GLOBAL |
|------------------------------|-------------|---|--------|
| GREEN BUILDING CERTIFICATION | 7% | Already achieved voluntary green building certification | 14% |
| | 43% | Plan to in the future | 44% |
| GREEN BUILDING TENANT SPACE | 53% | Willing to pay a premium to lease space in a certified green building | 51% |
| NET ZERO ENERGY/ CARBON | 44% | Extremely or very likely to have one or more facilities that are nearly zero, net zero or positive energy or carbon status in the next ten years. | 50% |
| OPERATE OFF THE GRID | 48% | Extremely or very likely to have a facility that will operate off the grid in the next ten years | 50% |
| RESILIENCE | 70% | Indicated that it is an extremely or very important factor when considering future energy and building infrastructure investments. | 72% |

2018 South Korea Survey Demographics

To qualify, respondents must have facility budget responsibility and propose or approve energy efficiency initiatives for their organization. The survey was administered anonymously by a third party research partner. For the 2018 South Korea survey, there was a representative mix of respondents from institutional, commercial, and industrial organizations. In addition, there was a range of organizational titles, including C-level executives, vice presidents, directors and managers.

